

PTR 2351 High-Pressure Chamber Operations

Compressor operation and maintenance; control panels; air storage and breathing gas systems; systems inspection, maintenance, and repair; and crew duties during practice dives to different ocean depths.

Nondestructive Inspection and Quality Control

QCI 1503 Radiography and Radiographic Equipment

Radiographic nondestructive inspection; includes principles of x-ray generation, radiation safety, x-ray equipment, and film processing equipment.

QCI 1509 Fundamentals of Nondestructive Inspection

Theory and practice of nondestructive inspection methods; includes basic metallurgy, development of inspection techniques, maintenance management, equipment authorization, technical publications, identification of aerospace construction features, and application of occupational and health standards.

QCI 1510 Optical, Liquid Penetrant, and Magnetic Particle Inspection

Fundamental principles of optical, liquid penetrant, and magnetic particle inspection methods; includes operation of equipment, interpretation of indicators, performance of inspections, and development of inspection techniques.

QCI 1511 Ultrasonic Inspection Fundamentals

Principles of ultrasonic inspection; includes operation and performing operator maintenance of equipment, knowledge of ultrasonic standards, inspection of parts, and interpretation of indicators.

QCI 1512 Eddy Current and Bond Testing Inspection Methods

Principles of eddy current and bond testing; includes various types of equipment, inspection standards, inspection of parts and equipment, and interpretation of inspection indicators.

QCI 2202 Quality Assurance

Advanced quality assurance procedures used to detect and analyze maintenance management deficiencies, determine causes, and recommend corrective actions; includes comprehensive interpretation of standard publication systems, technical manual systems, personnel evaluations, inspection categories, management evaluations, deficiency analysis, oral and written communications, and activity inspections.

QCI 2513 Spectrometric Oil Analysis Equipment

Operation and maintenance of atomic emission spectrometer and atomic absorption spectrophotometer.

Radiologic Technology

RAD 1301 Introduction to Radiologic Technology

Radiation protection; professional ethics; prime exposure factors; operation of energized x-ray units; and effects of KVP, MAS, time, and distance on radiographic film quality.

RAD 1302 Introduction to Radiographic Physics

Principles of x-ray production; interaction of x rays with matter; basic x-ray circuits; construction of x-ray tubes; methods of rectification; x-ray detection and measurement; and effects of KVP, MAS, distance, and collimation on patients.

RAD 1303 Radiographic Anatomy and Physiology of the Human Body

Structure and functions of body organs and radiology of osteology and topographic anatomy.

RAD 1304 Radiographic Techniques and Darkroom Procedures

Characteristics of radiographic film, construction and design of radiographic darkrooms, manual and automatic processing techniques, stereoradiography, scanography, and body section radiography.



RAD 1305 Introduction to Radiographic Positioning

Patient positioning, radiographic projection terminology, and production of standard radiographs on radiographic phantoms.

RAD 1306 Introduction to Special Radiographic Procedures

Injection of radiographic contrast media----effect on anatomy, reactions, and projections. Pressure injectors, rapid film changes, and special procedures.

RAD 2301 Radiography Clinical Education

Clinical environment practicum of a training hospital, radiographic exposure principles and systems, preparation of technique charts, standardization of manual/automatic film-processing system, reduction of scattered/secondary radiation, and radiation protection.

RAD 2302 Radiography Clinical Practicum

Exposure techniques and radiographic positioning to improve radiographic film quality; factors in reduction of patient exposure to ionizing radiation; accessory devices for patient safety; review of special radiographic techniques; and introduction to emergency resuscitation, vital signs, and parenteral administration.

RAD 2303 Advanced Special Radiographic Procedures

Radiographic equipment used for special procedures; review of radiographic examinations that require negative or positive contrast media; and portable radiographic equipment used in patient treatment and surgery.

RAD 2304 Radiography Internship

Standard radiographic procedures accomplished under supervision of qualified radiology technologists. Assisting radiologist with barium contrast studies, negative and positive intervention studies, nonstandard radiographic procedures, and increasingly expanded duties under limited or no supervision.

RAD 2306 Diagnostic Ultrasound

Diagnostic ultrasound principles and equipment. Includes abdominal and pelvic sonography and obstetrical applications.

RAD 2307 Ultrasonic Scanning

Procedures and application of obstetrical, pelvic, abdominal, thyroid, breast, testicular, and superficial structure scans.

Recreation

REC 1101 Recreation Services Management

Policies pertaining to management of recreation services and facilities and management of recreation resources. Includes employee administration; determining workload requirements; writing position descriptions, performance ratings, and operating instructions; implementing hiring practices, employee motivation techniques, and safety standards; managing sales/merchandising, publicity, materials, equipment, and supplies; monitoring insurance programs; developing facility projects; and preparing reports.

REC 1102 Fitness and Health

Methods used in measuring physical fitness, determining nutrition requirements, evaluating human physiology, analyzing exercise physiology, and managing health resources.

REC 1103 Morale, Welfare, and Recreation (MWR) Management

MWR management with emphasis on employee administration, procurement of resources/facilities, and organization of MWR activities.

REC 2101 Recreational Business Operations Management

Principles and techniques in recreational business management. Includes management and operation of restaurants, bars, and lounges, rental equipment units, and craft and recreational centers.

REC 2102 Advanced Morale, Welfare, and Recreation (MWR) Management

MWR management with emphasis on employee administration, procurement of resources and facilities, and organization of activities.

RTB 1803 TV Production

Advanced special effects and video-editing techniques; includes planning and producing TV productions, single and multiple concepts, dramatization techniques, and final product analysis.

RTB 1805 Electronic Field Production (EFP)

Setup and operation of EFP equipment under controlled and uncontrolled conditions; includes body braces and tripods, handheld operations, lighting requirements, pictorial continuity; operator maintenance; and practice with EFP video-editing systems.

Radio and Television Broadcasting

RTB 1101 Film/Video Lighting

Concepts and application of principles of lighting to various systems. Skills developed in both studio and remote location through lecture and application with primary emphasis on video production.

RTB 1102 Film/Video Editing

Concepts and principles of post-production editing. Includes film and video-editing techniques, equipment, and progression and sequencing with primary emphasis on video production.

RTB 1400 Introduction to Television Production

Various aspects of production; includes equipment use, direction techniques, control room responsibilities, floor management, color and black-and-white lighting techniques, studio operation, special effects, telecine theory, script analysis, and camera operation.

RTB 1801 Audio Mixing and Production

Basic audio theory. Includes use of microphones and tape recorders; techniques for splicing, editing, duplicating, storing, and handling equipment/materials; and user maintenance of audio equipment.

RTB 1802 TV Studio Operation

Principles for television production; includes personnel functions, control room responsibilities, set construction, camera operations, video switching, makeup techniques, fundamentals of color theory, telecine operations, TV lighting, and teleprompter operations.

Safety

SAF 1802 Missile, Explosives, and Nuclear Safety

Safety standards for handling, storing, transporting, and operating conventional and nuclear munitions and missiles.

SAF 1803 Accident Investigation

Accident investigation, reporting, and analysis with emphasis on trend analysis, statistical displays, report preparation, accident investigation, and system validation.

SAF 1808 Nuclear, Biological, and Chemical Safety

Physical properties, physiological effects, and safety measures concerning nuclear, biological, chemical, and other dangerous materials. First aid for chemical agent accidents and operational procedures and techniques for nuclear, biological, and chemical detection equipment; decontamination equipment; protective equipment; individual and collective protection; radiac instruments; and nuclear, biological, and chemical research programs.

SAF 1811 Safety Engineering

Safety techniques and program requirements concerning electrical problems, high-pressure liquids and gases, explosives, chemical safety, environmental health, and portable power handtool hazards. Protective equipment and procedures for machine guarding, hazard identification, safety color coding, and use of industrial shop safety surveys. Includes practical exercises in shop layout and resolving problems in storage, construction, and flight-line safety.